An integrated counter-measure system could prevent over 48 percent of rear-end, run-off-road, and lane change crashes. This represents more than 1.8 million target crashes.

Integrated Vehicle Based Safety Systems

A Major ITS Initiative

Preventing Collisions the Smart Way

About 2.6 million rear-end, road departure, or lane change crashes occur each year. Of these, 27,500 crashes (about 3/4 of the total fatal crashes) result in one or more fatalities.

The widespread deployment of advanced integrated driver assistance systems has the potential to reduce rear-end, road departure, and lane change collisions by 48 percent. Integrated systems will provide better hazard information from multiple sensors, enabling coordinated warnings to reduce driver distraction. The Integrated Vehicle Based Safety Systems (IVBSS) initiative aims to equip all new vehicles with advanced driver assistance systems that would help drivers avoid the most common types of deadly crashes.

An Integrated Solution

This initiative, in partnership with the automotive industry, builds on completed and ongoing Intelligent Vehicle Initiative (IVI) field operational tests as well as results from naturalistic driving studies. It will involve projects and studies that include private passenger vehicles, freight-carrying trucks, and transit buses.

The IVBSS initiative will:

- Develop information on how best to communicate an integrated warning to the driver
- Develop objective tests and criteria for performance of systems that simultaneously address rear-end, road departure, and lane change crashes
- Develop and field test integrated vehicle-based safety systems on the road with real drivers to understand the safety benefits of integrated systems

This initiative is the first attempt to fully integrate the individual solutions that address these three types of crashes. This research will combine existing research results and state-of-the-art commercial products and product performance for all systems related to this problem.

For more information about this US DOT initiative:

www.its.dot.gov/ivbss

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